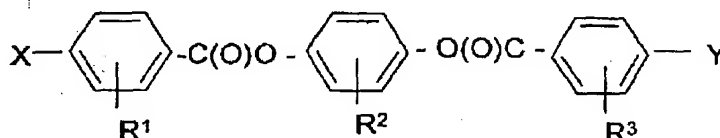


Amendments to the Claims:

1-104. (Canceled).

1 105. (New) A method for producing a blend comprising randomly substituted
 2 mesogens, said method comprising:
 3 providing one or more platform molecules have the following general structure:



4
 5 wherein:

6 X and Y are independently selected from the group consisting of terminal
 7 functionalities and spacer groups, one or more member selected
 8 from the group consisting of X and Y comprising one or more
 9 spacer groups;
 10 R² is a bulky organic group whereby, when both X and Y are reacted with
 11 polymerizable groups to produce polymerizable mesogens, R²
 12 provides sufficient steric hindrance to achieve a nematic state at
 13 room temperature while suppressing crystallinity of said
 14 polymerizable mesogens at room temperature; and,
 15 R¹ and R³ are selected from groups less bulky than R²; and
 16 independently substituting at least one member selected from the group
 17 consisting of X and Y with a polymerizable group, thereby producing a
 18 blend of randomly substituted mesogens.

1 106. (New) The method of claim 105 wherein the blend of randomly
2 substituted mesogens has a T_c of from about 20 °C to about 37 °C.

1 107. (New) The method of claim 106 wherein X comprises a terminal functionality
2 and Y comprises a polymerizable group in about 60 wt.% of said blend of randomly
3 substituted mesogens.

1 108. (New) The method of claim 106 wherein X comprises a terminal functionality
2 and Y comprises a polymerizable group in about 70 wt.% of said blend of randomly
3 substituted mesogens.

1 109. (New) The method of claim 106 wherein said polymerizable groups are
2 selected from the group consisting of acryloyloxy groups, methacryloyloxy groups,
3 acryloyloxy alkoxy groups, and methacryloxyalkoxy groups comprising an alkyl moiety
4 having from about 2 to about 12 carbon atoms and comprising CH_2 groups, wherein one or
5 more of said CH_2 groups independently can be substituted by oxygen, sulfur, or an ester
6 group; provided that at least 2 carbon atoms separate said oxygen or said ester group.

1 110. (New) The method of claim 107 wherein said polymerizable groups are
2 selected from the group consisting of acryloyloxy groups, methacryloyloxy groups,
3 acryloyloxy alkoxy groups, and methacryloxyalkoxy groups comprising an alkyl moiety
4 having from about 2 to about 12 carbon atoms and comprising CH_2 groups, wherein one or
5 more of said CH_2 groups independently can be substituted by oxygen, sulfur, or an ester
6 group; provided that at least 2 carbon atoms separate said oxygen or said ester group.

1 111. (New) The method of claim 108 wherein said polymerizable groups are
2 selected from the group consisting of acryloyloxy groups, methacryloyloxy groups,

3 acryloyloxy alkoxy groups, and methacryloyloxyalkoxy groups comprising an alkyl moiety
4 having from about 2 to about 12 carbon atoms and comprising CH₂ groups, wherein one or
5 more of said CH₂ groups independently can be substituted by oxygen, sulfur, or an ester
6 group; provided that at least 2 carbon atoms separate said oxygen or said ester group.

1 112. (New) The method of claim 106 wherein said polymerizable groups are
2 selected from the group consisting of cinnamoyloxy groups, acryloyloxy groups,
3 methacryloyloxy groups, acryloyloxy alkoxy groups and methacryloyloxy alkoxy groups
4 comprising an alkyl moiety having from about 2 to about 12 carbon atoms, thiol alkoxy
5 groups comprising an alkyl moiety having from about 2 to about 12 carbon atoms, said alkyl
6 moiety comprising CH₂ groups, wherein one or more of said CH₂ groups independently can
7 be substituted by oxygen, sulfur, or an ester group; provided that at least 2 carbon atoms
8 separate said oxygen or said ester group.

1 113. (New) The method of claim 108 wherein said polymerizable groups are
2 selected from the group consisting of cinnamoyloxy groups, acryloyloxy groups,
3 methacryloyloxy groups, acryloyloxy alkoxy groups and methacryloyloxy alkoxy groups
4 comprising an alkyl moiety having from about 2 to about 12 carbon atoms, thiol alkoxy
5 groups comprising an alkyl moiety having from about 2 to about 12 carbon atoms, said alkyl
6 moiety comprising CH₂ groups, wherein one or more of said CH₂ groups independently can
7 be substituted by oxygen, sulfur, or an ester group; provided that at least 2 carbon atoms
8 separate said oxygen or said ester group.

1 114. (New) The method of claim 106 wherein said polymerizable groups are
2 selected from the group consisting of acryloyloxy alkoxy groups and methacryloyloxy

3 alkoxy groups.

1 115. (New) The method of claim 107 wherein said polymerizable groups are
2 selected from the group consisting of acryloyloxy alkoxy groups and methacryloyloxy
3 alkoxy groups.

1 116. (New) The method of claim 108 wherein said polymerizable groups are
2 selected from the group consisting of acryloyloxy alkoxy groups and methacryloyloxy
3 alkoxy groups.

1 117. (New) The method of claim 106 wherein said polymerizable groups are
2 methacryloyloxy alkoxy groups.

1 118. (New) The method of claim 108 wherein said polymerizable groups are
2 methacryloyloxy alkoxy groups.

1 119. (New) The method of claim 106 wherein said terminal functionalities are
2 selected from the group consisting of hydroxyl groups, amino groups, sulfhydryl groups,
3 halogen atoms, alkoxy groups, and spacer groups.

1 120. (New) The method of claim 107 wherein are selected from the group
2 consisting of hydroxyl groups, amino groups, sulfhydryl groups, halogen atoms, alkoxy
3 groups, and spacer groups.

1 121. (New) The method of claim 108 wherein said terminal functionalities are
2 selected from the group consisting of hydroxyl groups, amino groups, sulfhydryl groups,
3 halogen atoms, alkoxy groups, and spacer groups.

1 122. (New) The method of claim 111 wherein said terminal functionalities are
2 selected from the group consisting of hydroxyl groups, amino groups, sulfhydryl groups,

3 halogen atoms, alkoxy groups, and spacer groups.

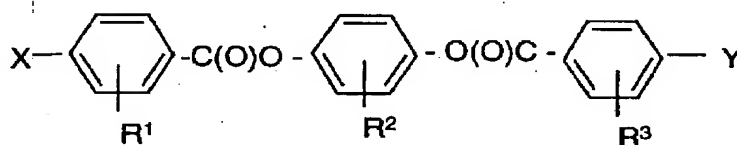
1 123. (New) The method of claim 113 wherein said terminal functionalities are
2 selected from the group consisting of hydroxyl groups, amino groups, sulfhydryl groups,
3 halogen atoms, alkoxy groups, and spacer groups.

1 124. (New) The method of claim 116 wherein said terminal functionalities are
2 selected from the group consisting of hydroxyl groups, amino groups, sulfhydryl groups,
3 halogen atoms, alkoxy groups, and spacer groups.

1 125. (New) The method of claim 118 wherein said terminal functionalities are
2 selected from the group consisting of hydroxyl groups, amino groups, sulfhydryl groups,
3 halogen atoms, alkoxy groups, and spacer groups.

1 126. (New) A method for producing a blend comprising randomly substituted
2 mesogens, said method comprising:

3 providing one or more platform molecules have the following general structure:



6 wherein

7 X comprises a terminal functionality and Y comprises a polymerizable
8 group in about 50 wt% or more of said blend, and one or more
9 members selected from the group consisting of X and Y
10 comprises one or more spacer groups;

R^2 is a bulky organic group whereby, when both X and Y are reacted with

11 polymerizable groups to produce polymerizable mesogens, R^2
12 provides sufficient steric hindrance to achieve a nematic state at
13 room temperature while suppressing crystallinity of said
14 polymerizable mesogens at room temperature; and,
15 R^1 and R^3 are selected from groups less bulky than R^2 ; and
16 independently substituting at least one member selected from the group
17 consisting of X and Y with a polymerizable group, thereby producing a
18 blend of randomly substituted mesogens.

1 127. (New) The method of claim 126 wherein said polymerizable groups are
2 selected from the group consisting of acryloyloxy groups, methacryloyloxy groups,
3 acryloyloxy alkoxy groups, and methacryloyloxyalkoxy groups comprising an alkyl moiety
4 having from about 2 to about 12 carbon atoms and comprising CH_2 groups, wherein one or
5 more of said CH_2 groups independently can be substituted by oxygen, sulfur, or an ester
6 group; provided that at least 2 carbon atoms separate said oxygen or said ester group.

1 128. (New) The method of claim 126 wherein said polymerizable groups are
2 selected from the group consisting of cinnamoyloxy groups, acryloyloxy groups,
3 methacryloyloxy groups, and acryloyloxy alkoxy and methacryloyloxy alkoxy groups
4 comprising an alkyl moiety having from about 2 to about 12 carbon atoms, thiol alkoxy
5 groups comprising an alkyl moiety having from about 2 to about 12 carbon atoms, said alkyl
6 moiety comprising CH_2 groups, wherein one or more of said CH_2 groups independently can
7 be substituted by oxygen, sulfur, or an ester group; provided that at least 2 carbon atoms
8 separate said oxygen or said ester group.

1 129. (New) The method of claim 126 wherein said terminal functionalities are
2 selected from the group consisting of hydroxyl groups, amino groups, sulfhydryl groups,
3 halogen atoms, alkoxy groups, and spacer groups.

1 130. (New) The method of claim 127 wherein said terminal functionalities are
2 selected from the group consisting of hydroxyl groups, amino groups, sulfhydryl groups,
3 halogen atoms, alkoxy groups, and spacer groups.

1 131. (New) The method of claim 128 wherein said terminal functionalities are
2 selected from the group consisting of hydroxyl groups, amino groups, sulfhydryl groups,
3 halogen atoms, alkoxy groups, and spacer groups.

1 132. (New) The method of claim 126 wherein the blend of randomly
2 substituted mesogens has a T_c of from about 20 °C to about 37 °C.

1 133. (New) The method of claim 127 wherein the blend of randomly
2 substituted mesogens has a T_c of from about 20 °C to about 37 °C.

1 134. (New) The method of claim 128 wherein the blend of randomly
2 substituted mesogens has a T_c of from about 20 °C to about 37 °C.

1 135. (New) The method of claim 129 wherein the blend of randomly
2 substituted mesogens has a T_c of from about 20 °C to about 37 °C.

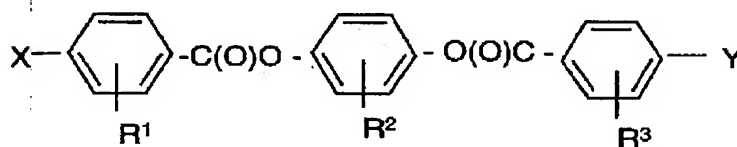
1 136. (New) The method of claim 130 wherein the blend of randomly
2 substituted mesogens has a T_c of from about 20 °C to about 37 °C.

1 137. (New) The method of claim 121 wherein the blend of randomly
2 substituted mesogens has a T_c of from about 20 °C to about 37 °C.

1 138. (New) A method for producing a blend comprising randomly substituted

2 mesogens, said method comprising:

3 providing one or more platform molecules have the following general structure:



4 wherein

6 X comprises a terminal functionality and Y comprises a polymerizable
7 group in about 50 wt% or more of said blend, and one or more
8 members selected from the group consisting of X and Y
9 comprises one or more spacer groups;

10 R² is a bulky organic group whereby, when both X and Y are reacted with
11 polymerizable groups to produce polymerizable mesogens, R²
12 provides sufficient steric hindrance to achieve a nematic state at
13 room temperature while suppressing crystallinity of said
14 polymerizable mesogens at room temperature; and,

15 R¹ and R³ are selected from groups less bulky than R²; and

16 independently substituting at least one member selected from the group
17 consisting of X and Y with a polymerizable group selected from the group
18 consisting of acryloyloxy alkoxy groups and methacryloyloxy alkoxy
19 groups, thereby producing a blend of randomly substituted mesogens
20 having a T_c of from about 20 °C to about 37 °C.

1 139. (New) The method of claim 138 wherein said polymerizable groups are

2 methacryloyloxy alkoxy groups.

1 140. (New) The method of claim 138 wherein said terminal functionalities are
2 selected from the group consisting of hydroxyl groups, amino groups, sulfhydryl groups,
3 halogen atoms, alkoxy groups, and spacer groups.

1 141. (New) The method of claim 139 wherein said terminal functionalities are
2 selected from the group consisting of hydroxyl groups, amino groups, sulfhydryl groups,
3 halogen atoms, alkoxy groups, and spacer groups.